

Abstract Submitted  
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**Using Brigham Young University’s Orson Pratt Observatory 16” telescope to identify possible transiting planets discovered by the Kilodegree Extremely Little Telescope<sup>1</sup>** KYLE MATT, DENISE STEPHENS, CLEMENT GAILLARD, Brigham Young University, MARY THEA DUMONT, UC Santa Cruz — We use a 16” telescope on the Brigham Young University (BYU) campus to follow-up on the Kilodegree Extremely Little Telescope (KELT) survey to identify possible transiting planets. KELT is an all sky survey that monitors the same area of the sky throughout the year to identify stars that exhibit a change in brightness. Objects found to exhibit a variation in brightness similar to predicted models of transiting planets are sent to the ground-based follow-up team where we get high precision differential photometry to determine whether or not a transit is occurring and if the transiting object is a planet or companion star. If a planetary transit is found, the object is forwarded for radial velocity follow-up and could eventually be published as a KELT planet. In this poster we present light curves from possible planets we have identified as well as eclipsing binary systems and non-detections. We will highlight features of our telescope and camera and the basic steps for data reduction and analysis.

<sup>1</sup>Using Brigham Young University’s Orson Pratt Observatory 16” telescope to identify possible transiting planets discovered by the Kilodegree Extremely Little Telescope

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